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#### Peer-review Method

External peer-review was done through double-blind method.

# Assessment of care needs of the elderly living in Kermanshah province in 2020

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## **ABSTRACT**

Introduction: The elderly often has complex and unknown needs that we have not yet been able to fully recognize in accordance with international standards in the country. Therefore, the present study tries to identify the types of care needs of the elderly living in the villages. Methods: This descriptive crosssectional study was performed on 312 elderly people over 60 years old without any problems in cognitive status (such as Alzheimer's) living in 16 villages of Hamil district of Kermanshah province in 2020. Data were collected by a questionnaire consisting of two parts: demographic and needs assessment based on Cumberwell standard tool (CANE) and analyzed using SPSS software. Results: studies showed that 33% of the elderly had exercise, 67.3% had an underlying disease, 32% had a history of surgery and 13.1% had smoking. According to the main findings of the study, the elderly had unmet needs that ranged from highest to lowest, including: benefits (37.3%), money and budgeting (30.8%), location (20.8%), nutrition (17.9%), sight / hearing (15.4%), daily activities (11.2%), physical health (10.6%), Home maintenance (8.3%), mobility (7.1%), information (6.7%), intimate communication (6.1%) and personal care (4.2%). Conclusion: Due to the greater need for care of the elderly, it is recommended to provide more support in all aspects at the national level and the support and attention of their relatives and families to these people.

**Keywords**: Elderly, social support, psychological needs

# 1. INTRODUCTION

The elderly often has complex and unknown needs, and in addition to physical disorders, they also have psychological, social, environmental, and health-related problems, and countries that will face significant populations in the elderly in the future, including Iran They must prepare themselves for the management of the aging wave in the next few decades (Estaji et al., 2020; Borji et al., 2020). Aging is a period that has certain characteristics. One of these features is the relative reduction of physical strength. With age, physical strength decreases and the elderly person have changes in the skin, heart and blood circulation, gastrointestinal tract and nervous system (Estaji et al., 2020; Mansouri Arani et al., 2020). With the increase in the number of elderly



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people, the diseases associated with old age, followed by dependence and the need for care are increasing, which doubles the importance of paying attention to the issue of care in the family and care experiences (Farhadi et al., 2016; Hatefi et al., 2019). Maintaining and improving health in old age not only helps prevent chronic diseases, but also contributes significantly to the independence and participation of the elderly in family and social activities. Many factors affect health and well-being. These factors include income, social status, employment status, education, social support networks, physical environment, social environment, genetic and biological endowments, personal hygiene practices and practical skills, healthy children's development, health services, culture and gender (Farhadi et al., 2016; Hatefi et al., 2019).

With the prevalence of aging, mental health problems have been seen more in this group of people and there is a need to pay special attention and support to the elderly (Khalighi et al., 2020; Karimian et al., 2020). The traditional image of the elderly as sick, disabled, dependent and alone must change. In general, all countries of the world consider aging as an important social phenomenon and seek to make continuous efforts in social support programs to meet their natural needs. Lack of knowledge about how to have a healthy life, including lack of attention to proper nutrition, lack of healthy physical activity, harmful habits such as smoking, lack of timely and continuous screening, lack of adequate sleep, lack of time for leisure and the lack of a happy mood and other issues have caused the diseases of the elderly to increase, so that most of the elderly in the country suffer from diseases such as osteoporosis, cancers, accidents, high blood pressure, cardiovascular disease and other chronic diseases. From now on, if there is no planning to prevent disabilities in the elderly in the country, in the future we will face a large number of disabled elderly people who impose the burden of illness and medical expenses on the Ministry of Health and Insurance. Providing a suitable solution to the problem of population aging requires objective, quantitative and scientific understanding of the dimensions of the problems of this age group (Khodamoradi et al., 2013).

Compared to urban areas, rural areas have less social support. Communication in the villages with friends, neighbors and others is less than in urban areas (Moskalewicz et al., 2019). Health inequality in rural areas compared to urban areas is in four categories: 1- Demographic characteristics 2- Socio-economic status 3- Access to health care 4- Quality of past life. The health of rural areas is poor and deserves more attention. Factors influencing this difference in health level include age, gender, income and education. Studies show that the health situation in rural areas needs more attention. Income status has a significant impact on health inequality (Pan et al., 2019). In rural areas, the problems and the need for care of the elderly are felt more. In this regard, this study tries to achieve a comprehensive understanding of all the care needs of the elderly living in rural areas by using specialized and multidimensional tools of Cambrol so that these issues can be realistically and closely studied.

# 2. METHOD

This descriptive-analytical study was performed on the elderly over 60 years old without any cognitive problems living in rural areas of Hamil district of Kermanshah province in 2020 as a quota sampling of 16 villages were selected and included in the study. This study lasted from January to September 2020. Sampling was done from each village by division method based on the number of elderly people. The total sample size was estimated at 312 people. Inclusion criteria were: age 60 years and above, living in villages of Hamil district of Kermanshah province, having the satisfaction of participating in the study, ability to answer questions, no serious hearing problems, no mental illness and cognitive disorders. Data were collected by a questionnaire consisting of two demographic sections and a needs assessment questionnaire based on the Cumber well standard tool (CANE). This questionnaire has 24 items in the areas related to the elderly and covers the needs of social, psychological, physical health and environmental needs.

The validity and reliability of the Camber well instrument in 2016 were evaluated by (Heidari et al., 2020). According to the results of this study, the intra-class correlation coefficient for total scores (met and unmet needs) with a confidence coefficient of 0.95 in the elderly and caregivers were 0.95 and 0.97, respectively (Estaji et al., 2020). In the present study, the internal consistency with Cronbach's alpha method was estimated to be 0.081 .Also, in order to carry out the present study, the researcher obtained an ethics code from the officials of the ethics committee of Ilam University of Medical Sciences and registered it with the number IR.MEDILAM.REC.1399.324 on 12/23/1399. Finally, the collected data were analyzed using SPSS version 21 with statistical methods and descriptive statistical tests including frequency, percentage, mean, analysis of variance, Chi-square and independent t-test.

# 3. RESULTS

The average age of the research units was 72.25 years. 312 people participated in this study, the highest percentage of which was related to men (52.2%). Other demographic information of the participants is shown in Table 1. In the continuation of the research, the findings of the Cambrol Needs Assessment Questionnaire showed that the unmet needs of the elderly are in order of priority in

benefiting from benefits such as insurance and pensions (37.3%), money and budgeting (30.8%), residence (20.8%), nutrition (17.9%), sight / hearing (15.4%), daily activities (11.2%), Physical health (10.6%), home maintenance (8.3%), mobility (7.1%), information (6.7%), intimate communication (6.1%) and personal care (4.2%). In contrast, among the needs that were met were the needs related to drug supply (42.2%), elimination of physical diseases (37.8%), information (31.4%), money / budgeting (24.4%). Benefits (24.1%) and nutrition (18.3%) were more significant than others. These findings are shown in Table 2. Among the 24 areas surveyed in the questionnaire, the sex variable was significantly associated with home care, medications and information. That is, the need for care in the field of home care, medicines and information in elderly women living in rural areas was more than older men.

Table 1 Frequency distribution of the studied samples according to demographic characteristics

Frequency (percentage)	Variable	Frequency (percentage)	Variable
103 (33)	Lack of sports activity	149 (47.8)	Female
210 (67.3)	Underlying disease	163 (52.2)	Man
102 (32.7)	No underlying disease	92 (29.5)	Single
100 (32)	History of surgery	220 (70.5)	Married
212 (68)	No history of surgery	215 (68.9)	Employed
166 (53.2)	History of drug use	97 (31.1)	Unemployed
146 (46.8)	Do not take medicine	53 (17)	Literate
41 (13.1)	Smoking	259 (83)	Illiterate
271 (86.9)	No smoking	302 (96.8)	the owner
21 (6.7)	drug use	10 (3.2)	Tenant
1 (0/3)	Consumption of alcohol	209 (67)	Having sports activities

Table 2 Frequency distribution of the needs of the elderly in Hamil ward of Kermanshah province

The need is not met		The need is met		No need		Areas of care needs of
Percentage	Percentage	Percentage	Percentage	Percentage	Abundance	the elderly
20.8	65	8	25	71.2	222	1. Location
8.3	26	10.9	34	80.8	252	2. Maintenance of the house
17.9	56	18.3	57	63.8	199	3. Food
4.2	13	2.9	9	92.9	290	4. Personal care
1	3	1.2	4	97.8	305	5. Take care of another person
11.2	35	3.5	11	85.3	266	6. Daily activities
2.6	8	0.3	1	97.1	303	7. Memory
15.4	48	8.3	26	76.3	238	8. Sight / hearing
7.1	22	12.8	40	80.1	250	9. Mobility
0.3	1	_	_	99.7	311	10. Urinary incontinence
10.6	33	37.8	118	51.6	161	11. Physical health
4.2	13	44.2	138	51.6	161	12. Medications
0.3	1	0.3	1	99.4	310	13. Symptoms of psychosis
2.2	7	3.5	11	94.2	294	14. Mental disorders
6.7	21	31.4	98	61.9	193	15. Information
0.6	2	_	_	99.4	310	16. Intentional self-harm
0.3	1	_	_	99.7	311	17. Unwanted self-harm
3.5	11	0.3	1	96.2	300	18. Abuse / Neglect
2.2	7	1.3	4	96.5	301	19. Behavior (conflict with others)

_	_	_	_	100	312	20. Alcohol abuse
1.9	6	3.2	10	94.9	296	21. Companionship
						(social communication)
6.1	19	2.9	9	91	284	22. Intimate
						communication
30.8	96	24.4	76	44.9	140	23. Money / Budgeting
37.3	116	1.24	75	38.6	120	24. Benefits (types of
						insurance or pension
						rights)

Among the 24 areas studied in the questionnaire, the variable of marital status had a significant relationship with the areas of home maintenance, food, daily activities, drugs, abuse (intimacy), intimate relationships and money and budgeting. That is, the unmet need in these areas was higher in single elderly people living in rural areas than in married elderly people living in these areas. Therefore, single elderly people in the above areas needed more care and assistance. Unmet needs in the areas of home care, food, personal care, other person care, daily activities, sight / hearing, mobility, physical health, medications, abuse (intimacy), intimate communication, money (budgeting) and benefits for the elderly Unemployment was higher than working elderly people living in rural areas. Therefore, unemployed elderly people in the mentioned areas needed more care and assistance. The unmet need for home care, food, daily activities, medicines, information and companionship was higher among the illiterate elderly than among the literate elderly living in rural areas. That is, illiterate elderly people needed more help and care in the mentioned areas (fig 1).

Unmet needs in the areas of residence, home care, food, personal care, other person care, daily activities, memory, mobility, physical health, medications, mental disorders, information, intentional self-harm, abuse / neglect, behavior, companionship, communication Intimacy, money and benefits in the elderly who did not exercise were more than the elderly who were active in sports such as walking. Therefore, sedentary elderly who did not exercise needed help and care in the mentioned areas. Unmet needs in the areas of residency, vision / hearing, physical health, medications, and information were higher in the elderly with underlying disease than in the elderly without the underlying disease. Therefore, the elderly living in rural areas with underlying diseases needed more care and assistance in the mentioned areas (table 3).

Table 3 Significant relationship between the needs of the studied samples in terms of gender, marital status and underlying disease

n realise	Total	Unmet needs	Satisfied	No mood (0)	Variable	Area of needs of
p-value To	Total	(2)	needs (1)	No need (0)	variable	the elderly
0.001	163	11(6.7)	8(4.9)	144(88.3)	Man	Maintenance of
0.001	100	11(0.7)	0(1.7)	111(00.0)	iviuit	the house
		1-440				
	149	15(10)	26(17.5)	108(72.5)	Female	
0.001	163	1(0.6)	68(41.7)	94(57.7)	Man	medicines
	149	12(8)	70(47)	67(45)	Female	
0.001	163	5(3)	43(26.4)	115(70.6)	Man	Information
	149	16(10.7)	55(37)	78(52.3)	Female	
0.001	220	17(7.8)	9(4)	194(88.2)	Married	Maintenance of
	92	9(9.7)	25(27.3)	58(63)	Single	Home
0.001	220	28(12.8)	30(13.6)	162(73.6)	Married	Food
	92	28(30.4)	27(29.4)	37(40.2)	Single	
0.017	220	18(8.2)	6(2.7)	196(89.1)	Married	Activities
	92	17(18.5)	5(5.4)	70(76.1)	Single	Daily
0.02	220	5(2.3)	94(42.7)	121(55)	Married	medicines
	92	8(8.7)	44(47.8)	40(43.5)	Single	
0.001	220	2(1)	0(0)	218(99)	Married	abuse/
	92	9(10)	1(1)	82(89)	Single	neglect

0.02	220	9(4)	4(2)	207(94)	Married	connections intimate
	92	10(10.9)	5(5.4)	77(83.7)	Single	-
0.007	220	57(25.9)	53(24.1)	110(50)	Married	Money /
	92	39(42.4)	23(25)	30(32.6)	Single	budgeting
0.029	210	49(23.3)	22(10.5)	139(66.2)	Sickness	Location
	102	16(15.7)	3(2.9)	83(81.4)	No disease	Residence
0.030	210	38(18.1)	21(10)	151(71.9)	Sickness	Vision /
	102	10(9.8)	5(4.9)	87(85.3)	No disease	Hearing
0.001	210	26(12.4)	112(53.3)	72(34.3)	Sickness	Health
	102	7(6.9)	6(5.9)	89(87.2)	No disease	physical
0.001	210	12(5.7)	133(63.3)	65(31)	Sickness	medicines
	102	1(0.98)	5(4.9)	96(94.1)	No disease	
0.001	210	19(9)	94(44.8)	97(46.2)	Sickness	Information
	102	2(1.96)	4(3.9)	96(94.1)	No disease	

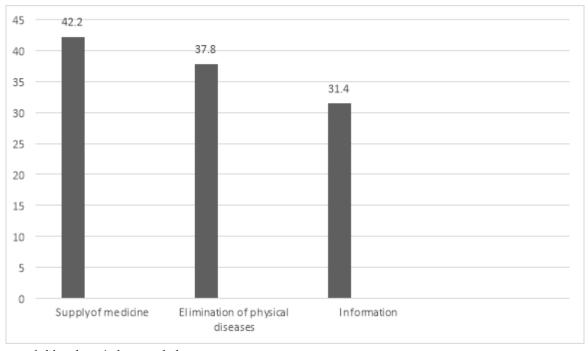


Figure 1 Status of elder abuse in kermanshah

# 4. DISCUSSION

In the present study, the care needs of the elderly in relation to various types of insurance and pensions had the highest percentage (37.3%). This means that the elderly in rural areas is not sufficiently covered by insurance and do not receive a sufficient pension. Gholizadeh et al., (1398) in Sabzevar showed that 23.01% of the elderly are not covered by health insurance and had the highest percentage, which is consistent with the present study (Estaji et al., 2013). Liangguin et al., (2014) in China showed that 96.37% of the elderly were covered by health insurance which is not consistent with the present study and may be due to differences in economic status and greater well-being of the elderly in China. It seems that due to having free jobs such as agriculture and animal husbandry in rural areas, the elderly in these areas have less insurance coverage and pensions than the elderly living in urban areas.

In the present study, the care needs of the elderly in relation to money and budgeting, the second need was not met and was 30.8%. This means that the elderly in rural areas do not have enough income and cannot afford their current living expenses. In this regard, the study showed that the financial surplus in urban elderly of Ilam was 0.1% while in rural elderly of Ilam was 12.8% (Farhadi et al., 2013) which indicates a lack of income among the elderly living in rural areas. In this regard, Mohebbi et al., (2013) showed that the financial negligence of the second surfer in rural elderly in Dezful was 22.8% (Farhadi et al., 2013) which is consistent with the present study and can be due to the unfavorable economic situation of the elderly living in rural areas. Liangwyn et al., (2014) Showed that two-thirds of the elderly received income through their children, at 65.35% (Karimian et al., 2020) which indicates a lack of income and problems in the elderly and is consistent with the present study. This can be due to the disability of the elderly, the lack of a stable job and the inability of the elderly to provide their daily livelihood. Vander et al., (2013) in the United States showed that the second most unmet need of the elderly was financial need, which indicates the financial need and lack of sufficient income of the elderly and their companions, which is consistent with the present study. Gio et al., (2019) in China showed that the difference in household income is the main cause of inequality of health services in the city compared to the countryside (Eftekhari et al., 2020).

In the present study, the care needs of the elderly in relation to the location of the third need were not met. This means that the elderly in rural areas do not have a proper home and cannot adapt their home. In this regard, the study of Alizadeh et al., (2014) showed that the physical health of the elderly (ability to perform daily life activities and physical function) in Tehran with the variables age, sex, marriage, education, employment status, source of income, insurance status, housing status and Companions living with the elderly have a significant relationship (Mansouri Arani et al., 2017), elderly and the need for care in this area. Bowling et al., (2003) in the United Kingdom showed that living in inappropriate places, not having enough income and not having good social connections are factors that affect the decline in quality of life. In this regard, the study of Nodehi Moghadam et al., (1396) in Mashhad showed that the effect of living place on both physical and psychological dimensions of quality of life is significant (Zhang et al., 2020), which indicates the need for care and the importance of the need in terms of location.

In the present study, the care needs of the elderly in relation to nutrition were not met in the fourth need (17.9%). This means that the elderly in rural areas do not receive adequate nutrition according to their age. The study of Lashkarbloki et al., (2014) showed that malnutrition and the risk of it in the elderly in Gorgan were 4.8% and 44.7%, respectively. In line with the present study, the importance of paying attention to nutrition in the elderly increases slowly. Panahi et al., (2009) showed that living without a spouse or family in the elderly increases the risk of malnutrition. Maria et al., (2021) in Brazil showed that living without a spouse in the elderly increases the risk of malnutrition (Mohebbi et al., 2020), which is consistent with the present study.

# 5. CONCLUSION

In the present study, the elderly living in rural areas of Hamil district of Kermanshah province had unmet needs, which were from the highest to the lowest, respectively, benefit, money and budgeting, accommodation, nutrition, sight / hearing, daily activities, physical health. Home maintenance, mobility, information, intimate communication and personal care also showed that the need for care in single, unemployed and illiterate elderly was higher than married, employed and literate elderly. The elderly lacked physical activity, sedentary lifestyle and underlying illness needed more care. Exercise, mobility and employment significantly reduced the need for care in the elderly. According to, the most effective demographic variable in the care needs of the elderly living in rural areas was first exercise and mobility and then having a job. Therefore, it is recommended to think of measures for the elderly living in the village to do more sports and mobility activities such as walking. Also, by creating job activities suitable for the elderly, it provided the ground for mobility and activation with the society, and by facilitating old-age marriage; it tried to reduce the care needs of this valuable segment of the society. It is suggested that by identifying the needs related to aging, scientific and practical solutions can be provided at the community and family level to meet and reduce the care needs of the elderly, especially the elderly in rural areas. With the help of scientific and academic centers and creating practical cooperation with health centers and health houses and providing scientific solutions based on the geographical, cultural, social and economic context of each rural area, these needs can be reduced as much as possible.

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#### **Informed Consent**

Written informed consent was obtained from eligible patients in their native language (Persian).

#### **Ethical Consideration**

Ilam University of Medical Sciences, Ilam, Iran (IR.IUMS.REC.1399.026)

#### Authors' contributions

HT, SKH, AE, AB participated to the conceptualization of the manuscript. HT, SKH wrote the first draft with the help of HT, SKH, AE, AB contributed to the writing, editing, and critical evaluation of the manuscript. The authors approved the submission of the final version of the manuscript.

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#### **Conflict of Interest**

The authors declare no conflict of interest.

## Data and materials availability

All data associated with this study are present in the paper.

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